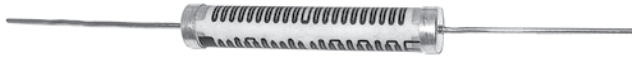
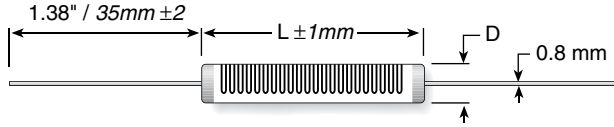


Super Mox Series

High Voltage



Uncoated resistor element pictured for demonstration purposes only.
Finished product is coated with silicone.



| Series | Power Rating (W) | Max. Oper. Voltage | Res. Range (Ω) | Max. VCR* | Dimensions (in./mm) | |
|--------|------------------|--------------------|--------------------|--------------|---------------------|-----------|
| | | | | | L | D |
| MOX910 | 3.80 | 15,000 | 1K-500M 500M-5G | 0.40 0.75 | 1.07/27.00 | 0.32/8.00 |
| MOX920 | 5.00 | 21,000 | 1K-1G 1G-10G | 0.20 0.40 | 1.46/37.00 | 0.32/8.00 |
| MOX930 | 7.50 | 30,000 | 1K-1G5 1G5-15G | 0.15 0.30 | 2.05/52.00 | 0.32/8.00 |
| MOX940 | 10.00 | 45,000 | 1K-2G5 2G5-25G | 0.10 0.15 | 3.03/77.00 | 0.32/8.00 |
| MOX950 | 13.50 | 60,000 | 1K-3G 3G-30G | 0.08 0.12 | 4.02/102.00 | 0.33/8.30 |
| MOX960 | 16.00 | 72,000 | 1K-4G 4G-40G | 0.06 0.10 | 4.80/122.00 | 0.34/8.50 |
| MOX970 | 20.00 | 90,000 | 1K-5G 5G-50G | 0.04 0.08 | 5.98/152.00 | 0.34/8.50 |

* typical values, contact factory for details

ORDERING INFORMATION

Coating

2 = conformal silicone standard
3 = conformal silicone high temp. with 350°C burn in

E = RoHS compliant

MOX91021006JTE

Super Mox Series
see chart for wattage

Ohms
First 3 digits are significant; 4th digit is multiplier (# of zeroes to follow). Examples:
1001 = 1000Ω
1503 = 150,000Ω
1006 = 100 MΩ

Tolerance*
A = 0.05%
B = 0.10%
C = 0.25%
D = 0.5%
F = 1%
G = 2%
J = 5%
K = 10%

TCR
T = 100ppm
V = 50ppm
W = 25ppm
X = 15ppm
Y = 10ppm

*Extremely tight tolerances not available across the full resistance range. Consult factory.

High-voltage Super Mox resistors have been developed to meet the precision temperature stability requirements of high-accuracy and high-voltage systems. Super Mox combines proprietary non-inductive resistance system and design to achieve low temperature coefficient, low voltage coefficients, high stability and increased high operating voltages. These resistors are designed to meet the demanding requirements of high voltage power supplies, electron microscopes, X-ray systems, high resolution CRT displays and geophysical instruments.

SPECIFICATIONS

Resistance Range: from 1KΩ to 50GΩ on all models (contact Ohmite for 51G to 1TΩ)

Tolerances: 0.05%, 0.1%, 0.25%, 0.5%, 1%, 2%, 5%, 10% (0.05% avail. to 10G, 0.25% to 100G, other on request)

Temperature Coefficients: 5, 10, 15, 25, 50 and 100ppm/°C (10ppm/°C available to 10G, 25ppm/°C to 100G, other on request)

Encapsulation: Silicone Conformal Coating

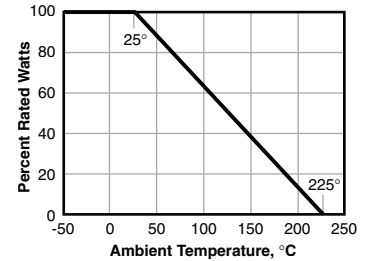
Terminal Material: Gold Plated

Core Material: Al₂O₃ (96%)

Resistor Material: Ruthenium Oxide

Operating Temperature: -55°C to 225°C (extended temperature range to 350°C available)

DERATING



PERFORMANCE DATA

| | | |
|-----------------------|----------------------------------|--|
| Insulation Resistance | >10,000 MΩ | 500 Volt 25 °C 75% relative humidity |
| Dielectric Strength | >1,000 Volt | 25 °C 75% relative humidity |
| Thermal Shock | Δ R/R < 0.1% typ., 0.20% max. | MIL Std. 202, method 107 Cond. C (IEC 68 -2 -14) |
| Overload | Δ R/R < 0.1% typ., 0.25% max. | 1.5 x P _{nom} , 5 sec (do not exceed max. voltage) |
| Moisture Resistance | Δ R/R < 0.1% typ., 0.25% max. | MIL Std. 202, method 106 (IEC 68 -2 -3) |
| Load Life | Δ R/R < 0.1% typ., 0.25% max. | 1000 hours at rated power (IEC 115 -1) |

STANDARD PART NUMBERS

| Part Number | Watts | Ohms 1% tol. | TCR |
|----------------|-------|-----------------|--------|
| MOX91021004FVE | 3.8W | 1M | 50ppm |
| MOX91025004FVE | 3.8W | 5M | 50ppm |
| MOX91021005FVE | 3.8W | 10M | 50ppm |
| MOX91022505FTE | 3.8W | 25M | 100ppm |
| MOX92021005FVE | 5W | 10M | 50ppm |
| MOX92025005FVE | 5W | 50M | 50ppm |
| MOX92021006FVE | 5W | 100M | 50ppm |
| MOX92021007FTE | 5W | 1000M | 100ppm |
| MOX93021004FVE | 7.5W | 1M | 50ppm |
| MOX93025004FVE | 7.5W | 5M | 50ppm |
| MOX93021005FVE | 7.5W | 10M | 50ppm |
| MOX93022505FTE | 7.5W | 25M | 100ppm |
| MOX94021005FVE | 10W | 10M | 50ppm |
| MOX94025005FVE | 10W | 50M | 50ppm |
| MOX94021006FVE | 10W | 100M | 50ppm |
| MOX94021007FTE | 10W | 1000M | 100ppm |
| MOX95021004FVE | 13.5W | 1M | 50ppm |
| MOX95025004FVE | 13.5W | 5M | 50ppm |
| MOX95021005FVE | 13.5W | 10M | 50ppm |
| MOX95022505FTE | 13.5W | 25M | 100ppm |
| MOX96021005FVE | 16W | 10M | 50ppm |
| MOX96025005FVE | 16W | 50M | 50ppm |
| MOX96021006FVE | 16W | 100M | 50ppm |
| MOX96021007FTE | 16W | 1000M | 100ppm |
| MOX97021004FVE | 20W | 1M | 50ppm |
| MOX97025004FVE | 20W | 5M | 50ppm |
| MOX97021005FVE | 20W | 10M | 50ppm |
| MOX97022505FTE | 20W | 25M | 100ppm |

Check product availability at www.ohmite.com